



1                   10.     The application programming interface according to claim 2,  
2     wherein control of said transfer of information to and from said second device are  
3     independent of internal implementation of said second device.

1                   11.     The application programming interface according to claim 1 further  
2     comprising:  
3                   a plurality of function calls.

1                   12.     The application programming interface according to claim 11,  
2     wherein one or more of said plurality of function calls are designed to allow said  
3     audio/video file system to handle a first type of file; and wherein one or more of said  
4     plurality of function calls are designed to allow said audio/video file system to handle a  
5     second type of file.

1                   13.     The application programming interface according to claim 12,  
2     wherein said first type of file is a non-audio/video file; and wherein said second type of  
3     file is an audio/video file.

1                   14.     The application programming interface according to claim 12,  
2     wherein said first type of file is smaller than said second type of file.

1                   15.     The application programming interface according to claim 11,  
2     wherein one or more of said plurality of function calls are designed to allow said  
3     audio/video file system to play or record a plurality of audio/video data streams  
4     concurrently.

1                   16.     The application programming interface according to claim 15,  
2     wherein said one or more of said plurality of function calls are designed to allow said  
3     audio/video file system to play or record said plurality of audio/video data streams  
4     concurrently by using a channel ID parameter and an object ID parameter.

1                   17.     The application programming interface according to claim 11,  
2     wherein one or more of said plurality of function calls are designed to allow said  
3     audio/video file system to play and record an audio/video data stream concurrently.

1           18.     The application programming interface according to claim 17,  
2 wherein said one or more of said plurality of function calls are designed to allow said  
3 audio/video file system to play and record said audio/video data stream concurrently by  
4 using a channel ID parameter and an object ID parameter.

1           19.     The application programming interface according to claim 11,  
2 wherein one or more of said plurality of function calls are designed to allow said  
3 audio/video file system to initiate a play or record operation starting from within an  
4 audio/video file.

1           20.     The application programming interface according to claim 19,  
2 wherein said one or more of said plurality of function calls are designed to allow said  
3 audio/video file system to initiate a play or record operation starting from within said  
4 audio/video file by using an offset parameter.

1           21.     The application programming interface according to claim 11,  
2 wherein one or more said plurality of function calls are designed to allow said  
3 audio/video file system to optimize disk access.

1           22.     The application programming interface according to claim 21,  
2 wherein said one or more of said plurality of function calls are designed to allow said  
3 audio/video file system to optimize disk access by designating a first group of function  
4 calls to handle a first type of file and a second group of function calls to handle a second  
5 type of file.

1           23.     The application programming interface according to claim 22,  
2 wherein said first type of file is a non-audio/video file; and wherein said second type of  
3 file is an audio/video file.

1           24.     The application programming interface according to claim 11,  
2 wherein one or more of said plurality of function calls are designed to allow said  
3 audio/video file system to perform a plurality of trick operations with a data stream.

1           25.     The application programming interface according to claim 24,  
2 wherein said plurality of trick operations includes a plurality of forward operations.

1                   26.     The application programming interface according to claim 25,  
2     wherein said plurality of forward operations includes a fast-forward operation, a slow-  
3     forward operation, and a step-forward operation.

1                   27.     The application programming interface according to claim 24,  
2     wherein said plurality of trick operations includes a plurality of reverse operations.

1                   28.     The application programming interface according to claim 27,  
2     wherein said plurality of reverse operations includes a fast-reverse operation, a slow-  
3     reverse operation, and a step-reverse operation.

1                   29.     An application programming interface for providing an interface  
2     with an audio/video file system capable of handling and organizing audio/video data,  
3     comprising:

4                   a first plurality of function calls including:

5                             a load function call designed to cause retrieval of descriptor  
6     information from a storage medium;

7                             a store function call designed to cause storing of said descriptor  
8     information onto said storage medium;

9                             a delete function call designed to cause deletion of said descriptor  
10    information from said storage medium; and

11                   a second plurality of function calls including:

12                             a play function call designed to cause a specified file to be played;

13                             a record function call designed to cause specified data to be  
14    recorded; and

15                             a stop function call designed to cause a play or record operation to  
16    be stopped.

1                   30.     The application programming interface according to claim 29,  
2     wherein said first plurality of function calls is designed to handle a first type of file; and  
3     wherein said second plurality of function calls is designed to handle a second type of file.

1                   31.     The application programming interface according to claim 30,  
2     wherein said first type of file is a non-audio/video file; and wherein said second type of  
3     file is an audio/video file.

1                   32.     The application programming interface according to claim 29,  
2     wherein said first plurality of function calls further includes:  
3                   a validity function call designed to verify validity of a specified  
4     descriptor; and  
5     wherein said second plurality of function calls further includes:  
6                   a pause function call designed to cause a play or record operation  
7     to be paused;  
8                   a resume function call designed to cause a previously paused  
9     operation to resume; and  
10                  an address retrieval function call designed to determine a logical  
11     block address of said specified file during a play or a record operation.

1                   33.     The application programming interface according to claim 29,  
2     wherein said second plurality of function calls includes:  
3                   a plurality of function calls designed to cause forward operations to be  
4     performed; and  
5                   a plurality of function calls designed to cause reverse operations to be  
6     performed.

1                   34.     The application programming interface according to claim 33,  
2     wherein said plurality of function calls designed to cause forward operations to be  
3     performed includes:  
4                   a fast-forward function call;  
5                   a slow-forward function call; and  
6                   a step-forward function call.

1                   35.     The application programming interface according to claim 33,  
2     wherein said plurality of function calls designed to cause reverse operations to be  
3     performed includes:  
4                   a fast-reverse function call;  
5                   a slow-reverse function call; and  
6                   a step-reverse function call.

1                   36.     The application programming interface according to claim 29,  
2     wherein said application programming interface is capable of being used by a first device

3 capable of handling isochronous and asynchronous data to communicate with said  
4 audio/video file system.

1 37. The application programming interface according to claim 36,  
2 wherein said first device is an audio/video controller.

1 38. The application programming interface according to claim 36,  
2 wherein said application programming interface is capable of being used by a second  
3 device capable of handling asynchronous data to communicate with said audio/video file  
4 system.

1 39. The application programming interface according to claim 38;  
2 wherein said first device is a SBP-2 controller.

1 40. The application programming interface according to claim 32,  
2 wherein said specified descriptor is an object descriptor.

1 41. The application programming interface according to claim 32,  
2 wherein said specified descriptor is a content list.

1 42. The application programming interface according to claim 32,  
2 wherein said specified descriptor is a performance list.

1 43. The application programming interface according to claim 32,  
2 wherein said specified descriptor is a HMS table.

1 44. The application programming interface according to claim 32,  
2 wherein each of said first and second plurality of function calls is capable of passing a  
3 plurality of parameters.

1 45. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said load function  
3 call includes a descriptor ID parameter, a type parameter, an offset parameter, a size  
4 parameter, a data\_location parameter, and a call\_back parameter.

1 46. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said store function

3 call includes a descriptor ID parameter, a type parameter, an offset parameter, a size  
4 parameter, a data\_location parameter, and a call\_back parameter.

1 47. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said delete  
3 function call includes a descriptor ID parameter, a type parameter, and a call\_back  
4 parameter.

1 48. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said play function  
3 call includes a channel ID parameter, an object ID parameter, a start\_position parameter,  
4 an\_end position parameter, a speed parameter, and a call\_back parameter.

1 49. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that are capable of being passed by said record  
3 function call include a channel ID parameter, an object ID parameter, a start\_position  
4 parameter, a type parameter, and a call\_back parameter.

1 50. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said stop function  
3 call includes a channel ID parameter, a call\_back parameter, and a logical\_byte\_address  
4 parameter.

1 51. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said pause function  
3 call includes a channel ID parameter, a call\_back parameter, and a logical\_byte\_address  
4 parameter.

1 52. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said resume  
3 function call includes a channel ID parameter and a call\_back parameter.

1 53. The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said address  
3 retrieval function call includes a channel ID parameter and a count parameter.

1           54.     The application programming interface according to claim 44,  
2 wherein said plurality of parameters that is capable of being passed by said validity  
3 function call includes a descriptor ID parameter, a type parameter and a call\_back  
4 parameter.

1           55.     The application programming interface according to claim 34,  
2 wherein said fast-forward function call is capable of passing a plurality of parameters  
3 including a channel ID parameter, a type parameter, an interval parameter, a repeat  
4 parameter, and a call\_back parameter.

1           56.     The application programming interface according to claim 34,  
2 wherein said slow-forward function call is capable of passing a plurality of parameters  
3 including a channel ID parameter, a repeat parameter, an increment parameter and a  
4 call\_back parameter.

1           57.     The application programming interface according to claim 34,  
2 wherein said step-forward function call is capable of passing a plurality of parameters  
3 including a channel ID parameter, an increment parameter and a call\_back parameter.

1           58.     The application programming interface according to claim 35,  
2 wherein said fast-reverse function call is capable of passing a plurality of parameters  
3 including a channel ID parameter, a type parameter, an interval parameter, a repeat  
4 parameter, and a call\_back parameter.

1           59.     The application programming interface according to claim 35,  
2 wherein said slow-reverse function call is capable of passing a plurality of parameters  
3 including a channel ID parameter, a repeat parameter, an increment parameter and a  
4 call\_back parameter.

1           60.     The application programming interface according to claim 35,  
2 wherein said step-reverse function call is capable of passing a plurality of parameters  
3 including a channel ID parameter, an increment parameter and a call\_back parameter.

1           61.     A method for providing communication with an audio/video file  
2 system, comprising steps of:



3 providing a first interface which controls transfers of information between  
4 said audio/video system and a first device capable of handling isochronous and  
5 asynchronous data; and  
6 providing a second interface which controls transfers of information  
7 between said audio/video system and a second device capable of handling asynchronous  
8 data.

1 62. The method according to claim 61, wherein said signals transferred  
2 between said audio/video system and said first device are independent of internal  
3 implementation of said first device; and  
4 wherein said signals transferred between said audio/video system and said  
5 second device are independent of internal implementation of said second device.

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